

REMARKS

Claims 1-16 were previously pending in the application. By the Amendment, Claims 3 and 11 are currently amended, and Claims 1-2, 4-10 and 12-16 remain unchanged. Applicants gratefully acknowledge the Examiner's indication that Claims 3-4 include allowable subject matter.

Allowable original Claim 3 has been rewritten in independent form to include all the limitations of the base claim and any intervening claims. Therefore, newly-independent Claim 3 is allowable. Dependent Claim 4 depends from independent Claim 3 and is allowable for the same and other reasons.

Applicants have obtained complete English translations of Shibuya and Takeuchi and have submitted these translations in a supplemental Information Disclosure Statement enclosed herewith.

The remaining claims stand rejected under the cited prior art of record. Specifically, Claims 1-2, 6-10 and 12-14 are rejected under 35 USC §103(a) as being unpatentable over Shibuya (JP 8-49161) in view of Takeuchi (JP 06126098A). Claims 5 and 15 are rejected under 35 USC §103(a) as being unpatentable over Shibuya in view of Takeuchi and further in view of Henry (US 6,722,053). Claim 11 is rejected under 35 USC §103(a) as being unpatentable over Takeuchi in view of Shibuya. Claim 16 is rejected under 35 USC §103(a) as being unpatentable over Takeuchi in view of Henry.

Independent Claim 1 recites a method of removing moisture from items of clothing, which comprises: bringing an item of clothing into contact with at least one absorbent body of an absorbent material in the form of a continuous strand; moving the at least one absorbent body and the item of clothing at the same speed; and subsequently separating the item of clothing from the at least one absorbent body.

Shibuya discloses a system for chemically processing clothing. In Shibuya, the clothing (40) is placed on a conveying member (12) that carries the clothing (40) through the device. The conveying member (12) includes a belt (10) that is both air permeable and liquid permeable. The device includes a first steam jet device (14) that sprays the clothing (40) with steam, a chemical agent sprinkler (16) that sprays the clothing (40) with the chemical agent and binder liquid, a second steam jet device (18) that sprays the

clothing (40) with steam again, and a drying chamber (37) that dries the clothing (40) to effect firm sticking of the chemical agent to the clothing (40).

Shibuya does not disclose any of the elements recited in Claim 1. Shibuya does not disclose “bringing an item of clothing into contact with at least one absorbent body of an absorbent material in the form of a continuous strand.” Shibuya discloses a drying chamber (37) to dry the clothing (40) and the belt (10) is made from an air and liquid permeable material. As acknowledged by the Examiner, Shibuya does not include any absorbent materials. Shibuya does not disclose “moving the at least one absorbent body and the item of clothing at the same speed.” Since Shibuya does not disclose any absorbent materials, it also does not disclose moving the absorbent materials at the same speed as the item of clothing. Finally, Shibuya does not disclose “separating the item of clothing from the at least one absorbent body.” Once again, since Shibuya does not disclose any absorbent materials, it also does not disclose separating the clothing from any absorbent materials.

Takeuchi does not cure the defects of Shibuya. As described in Applicants’ previous Amendment dated December 12, 2004, Takeuchi discloses a device to dehydrate clothing as part of a washing process in which the drive means intermittently drives the conveyor means and the drying means. In Takeuchi, the clothing or washings (12) hang from hangers (13) on a conveying means that intermittently carries the washings by starting and stopping the conveyor at various dehydration stations (20, 21, 22). The first station (20) includes two sponge rubber water absorption equipments (23), the second station (21) includes a suction dehydrator (24), and the third station (22) includes two additional sponge rubber water absorption equipments (25, 26). (See Fig. 2)

In operation, the intermittent drive of Takeuchi carries the washing (12) and *stops* at the first station (20). (See Paragraph 19) The two water absorption equipments (23) then press two sponge rubbers (38, 40) against the washings (12) while the washings (12) are stationary at the first station (20) to absorb water from the washings (12). The sponge rubbers (38, 40) are then removed from the washings (12) and the intermittent drive advances the washings (12) to the second station (21). When the sponge rubbers (38, 40) are separated from the washings (12), a chain (49) is driven that carries squeezing roller (55) in direction B to press out the moisture from the sponge rubbers (38, 40). The

sponge rubbers (38, 40) remain *stationary* while the squeezing rollers (55) are moved *in relation to the sponge rubbers* (38, 40). (See Fig. 3 and Paragraph 20) The sponge rubbers (38, 40) are not conveyors. Rather, the sponge rubbers (38, 40) are flat panels on the pressing equipment (23) that remain fixed to the support plate (35).

The intermittent drive then *stops* the washings (12) at the second station (21) at which the suction dehydrator (24) is activated. When the second station (21) is complete, the intermittent drive advances the washings (12) and then *stops* the washings (12) at the third station (22). The third station (22) is similar to the first station (20), but the third station (22) only has a sponge rubber on one side of the washings (12). Sponge rubber water absorption equipment (25) is substantially the same as equipment (23). However, equipment (26), which opposes equipment (25), does not include a sponge rubber (38, 40). When the third station (22) is complete, the intermittent drive advances the washings to the take off connection (15) where it is removed from the conveying means.

Takeuchi does not disclose a cloth dewatering conveyor of absorbent material. Rather, Takeuchi discloses a fixed sponge (38, 40) that is pressed against the clothing while the clothing is stationary. The squeezing roller (55) is then moved along chain (49) in relation to the sponge (38, 40) after the sponge (38, 40) is separated from the clothing to press out excessive moisture from the sponge.

In the Office action dated March 9, 2005, the Examiner states that "it would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the conveyor 40 of Takeuchi for the conveyor 10 of Shibuya and to provide the method and apparatus of Shibuya with two absorbent bodies on both sides of the clothing as taught by Takeuchi in order to absorb clothes moisture and improve the cloth dewatering efficiency." Initially, as described above, Takeuchi does not disclose a conveyor of absorbent material. In addition, the Examiner has not established a *prima facie* case of obviousness with respect to the claimed invention.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the references or to combine

reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claims limitations.

First, the Examiner has not identified any suggestion or motivation within the prior art to combine Shibuya and Takeuchi. The level of skill in the art cannot be relied upon to provide the suggestion to combine references. The mere fact that references *can* be combined or modified does not render the resultant combination obvious unless the prior art also *suggests the desirability* of the combination. The fact that an absorbent material could be substituted for the air and liquid permeable conveying means (12) does not suggest replacing the conveying means (12) of Shibuya with an absorbent material. There is no suggestion in the prior art to substitute an absorbent material for the conveying means (12) of Shibuya.

In addition, there is no suggestion or motivation to make the proposed modification if the proposed modification would render the prior art being modified unsatisfactory for its intended purpose. Shibuya discloses a process for chemically treating clothing. Shibuya includes a conveying means (12) having a belt (10) that is air and liquid permeable. As shown in Fig. 1 of Shibuya, the conveying means (12) carries the clothing (40) through a first steam injection equipment (14) that includes injection nozzles (24) located below the belt (10). (See Fig. 1 and paragraph 9) Therefore, the belt (10) is positioned between the clothing (40) and the injection nozzles (24), and the injection nozzles (24) spray steam *through* the air and liquid permeable belt (10) and onto the clothing (40).

Shibuya also discloses chemical spray equipment (16) having spray nozzles (29) located below the belt (10). The spray nozzles (29) spray chemicals *through* the air and liquid permeable belt (10) and onto the clothing (40) to chemically treat the clothing (40). Shibuya also includes a second steam injection equipment (18) having additional injection nozzles (24) located below the belt (10). These injection nozzles (24) also spray steam *through* the air and liquid permeable belt (10) and onto the clothing (40). Therefore, a significant intended purpose of the air and liquid permeable belt (10) of Shibuya is to permit steam and chemical agents to easily pass through the belt (10).

As describe above, Takeuchi does not disclose a conveyor made of absorbent material. However, even if it did, substituting an absorbent material for the belt (10) of Shibuya would render the belt (10) unsatisfactory for its intended purpose of permitting steam and chemical agents to easily pass through the belt (10) and act on all sides the clothing (40). By definition, an absorbent material would absorb the moisture or chemical agents that were intended for the clothing (40) in Shibuya. The absorbent material would prevent the nozzles located below the belt (10) from spraying their discharge on the clothing (40).

Also, an intended purpose of Shibuya is to apply a chemical treatment to the clothing. This chemical treatment is sprayed on the clothing in a chemical solution and steam is also sprayed on the clothing to facilitate even distribution of the chemical solution on clothing. Bringing an absorbent material in contact with the chemically treated clothing (40) would absorb some of the chemical solution away from the clothing. Shibuya only includes an air dryer (22) having a blower (38) that dries the clothing with a hot blast of air through the belt (10) to adhere the chemical agents onto the clothing. The dryer in Shibuya does not contact the clothing. Therefore, modifying the conveyor of Shibuya to include an absorbent material would render the conveyor of Shibuya unsatisfactory for its intended purpose, and there is no suggestion or motivation to make the proposed modification.

Finally, the combination of Shibuya and Takeuchi does not teach or suggest all the claims limitations as recited in Claim 1. Neither Shibuya nor Takeuchi disclose “bringing an item of clothing into contact with at least one absorbent body of an absorbent material in the form of a continuous strand,” as recited in Claim 1. Shibuya discloses a conveyor made from an air and liquid permeable material. As acknowledged by the Examiner, Shibuya does not include any absorbent materials. Takeuchi discloses a sponge rubber panel that is not a conveyor and is not a continuous strand. The sponge rubber remains fixed on a press and excessive moisture is squeezed from the sponge rubber with a movable roller.

Neither Shibuya nor Takeuchi disclose “moving the at least one absorbent body and the item of clothing at the same speed.” Since Shibuya does not disclose any absorbent materials, it also does not disclose moving the absorbent materials at the same

speed as the item of clothing. In Takeuchi, the clothing is driven intermittently and the drive stops the clothing at each individual station. The sponge rubbers are then pressed against the clothing while the clothing remains stationary. Therefore, Takeuchi does not disclose “at least one absorbent body of an absorbent material in the form of a continuous strand” and “moving the at least one absorbent body and the item of clothing at the same speed,” as recited in Claim 1.

Neither Shibuya nor Takeuchi disclose the “at least one absorbent body of an absorbent material in the form of a continuous strand” and therefore do not disclose “separating the item of clothing from the at least one absorbent body.”

Therefore, the Examiner has not established a *prima facie* case of obviousness with respect to the claimed invention, and it would not have been obvious for one of ordinary skill in the art to combine Shibuya and Takeuchi to derive the claimed invention.

For these and other reasons, Shibuya and Takeuchi, either alone or in combination, do not teach or suggest the subject defined by independent Claim 1. Therefore, Claim 1 is allowable. Claims 2 and 5-10 depend from Claim 1 and are allowable for the same reasons and also because they recite additional patentable subject matter.

Independent Claim 11 recites a method of removing moisture from items of clothing, which comprises: bringing an item of clothing into contact with at least one absorbent body of an absorbent material in the form of a continuous strand and having a plurality of sections; circulating the absorbent body to successively move individual sections of the absorbent body into contact with the item of clothing and to a configuration for removing moisture from a section of the absorbent body; separating the section from the item of clothing; subjecting the item of clothing to action of at least one gas jet acting transversely to a surface of the item of clothing following contact with the absorbent body; and removing moisture from the absorbent body following contact with the item of clothing. Claim 11 has been amended to correct typographical errors.

The Examiner has not established a *prima facie* case of obviousness with respect to the claimed invention, as recited in Claim 11. As described above in relation to Claim

1, there is no suggestion or motivation to combine Takeuchi and Shibuya. The same arguments apply in relation to the combination of Takeuchi and Shibuya for Claim 11.

In addition, the combination of Takeuchi and Shibuya does not teach or suggest all the claims limitations as recited in Claim 11. Neither Takeuchi nor Shibuya teach or suggest “bringing an item of clothing into contact with at least one absorbent body of an absorbent material in the form of a continuous strand and having a plurality of sections,” as recited in Claim 11. As described above, Takeuchi discloses a sponge rubber panel that is not a conveyor and is not a continuous strand. The sponge rubber remains fixed on a device that is pressed against the clothing while the clothing is stationary.

Takeuchi does not disclose “circulating the absorbent body to successively move individual sections of the absorbent body into contact with the item of clothing and to a configuration for removing moisture from a section of the absorbent body.” The sponge rubber panels of Takeuchi are simply pressed against the clothing and are not circulated to successively move individual sections of the absorbent body into contact with the item of clothing. The sponge rubber panels of Takeuchi are simply pressed against the clothing and removed from the clothing. The same portion of the sponge rubber continually contacts the clothing and they are not circulated in a successive manner. The movable squeezing roller removes excessive moisture from the sponge rubbers while the sponge rubbers remain stationary.

For these and other reasons, Takeuchi and Shibuya, either alone or in combination, do not teach or suggest the subject defined by independent Claim 11. Therefore, Claim 11 is allowable.

Independent Claim 12 recites a configuration for removing moisture from items of clothing, comprising: at least one absorbent body of an absorbent material in the form of a continuous strand being brought into contact with an item of clothing and being moved at the same speed as the item of clothing; and a contacting device adapted to contact an item of clothing with said at least one absorbent body and to separate the item of clothing from said at least one absorbent body.

The Examiner has not established a *prima facie* case of obviousness with respect to the claimed invention, as recited in Claim 12. As described above in relation to Claim 1, there is no suggestion or motivation to combine Shibuya and Takeuchi. The same

arguments also apply in relation to the combination of Shibuya and Takeuchi for Claim 12.

In addition, the combination of Shibuya and Takeuchi does not teach or suggest all the claims limitations as recited in Claim 12. Neither Shibuya nor Takeuchi teach or suggest “at least one absorbent body of an absorbent material in the form of a continuous strand being brought into contact with an item of clothing and being moved at the same speed as the item of clothing,” as recited in Claim 12. As acknowledged by the Examiner, Shibuya does not include any absorbent materials. As described above, Takeuchi discloses a flat panel sponge rubber fixed to a pressing device. Takeuchi does not teach or suggest a conveyor made from an absorbent material or “an absorbent material in the form of a continuous strand,” as recited in Claim 12.

Also, Takeuchi discloses pressing the sponge rubbers against the clothing while the clothing is stationary, and then removing the sponge rubbers from clothing. Takeuchi does not disclose the absorbent body “being moved at the same speed as the item of clothing,” as recited in Claim 12.

For these and other reasons, Shibuya and Takeuchi, either alone or in combination, do not teach or suggest the subject defined by independent Claim 12. Therefore, Claim 12 is allowable. Claims 13-15 depend from Claim 12 and are allowable for the same reasons and also because they recite additional patentable subject matter.

Independent Claim 16 recites a configuration for removing moisture from items of clothing, comprising: at least one absorbent body of a microfiber material; a contacting device adapted to contact an item of clothing with said at least one absorbent body and to separate the item of clothing from said at least one absorbent body, said contacting device having a pressure-exerting roller spaced apart from said at least one absorbent body, and a transporting device moving a plurality of items of clothing successively in a direction of said at least one absorbent body and away therefrom and between said at least one absorbent body and said pressure-exerting roller.

The Examiner has not established a prima facie case of obviousness with respect to the claimed invention, as recited in Claim 16. There is no suggestion or motivation to combine Takeuchi and Henry. As described above, Takeuchi presses the clothing between two sponge rubber panels while the clothing is stationary.

Henry discloses a process for pre-drying textile filaments by carrying the filaments (3) on a conveyor (4) through a mechanical squeeze-drying means (5). Henry discloses that the conveyor (4) is made from a permeable material and Henry does not disclose any absorbent material. The mechanical squeeze-drying means (5) expels moisture from the filaments and the moisture is recovered in Chamber (7).

Takeuchi and Henry disclose two separate means for removing moisture from textiles. Takeuchi discloses contacting the clothing with two opposing absorbent sponge rubber panels, and Henry discloses running the textile filaments through mechanical squeeze-drying means (5) that squeeze out excessive moisture. The two disclose performing substantially the same task of drying textiles, but disclose two separate ways in which to perform this task. There is no suggestion or motivation in the prior art to combine these two different methods. Nor is there any suggestion in the prior art of the desirability to combine these two different methods.

The Examiner states “it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the cloth dewatering method and apparatus of Takeuchi with pressure-exerting roller as taught by Takeuchi in order to remove the moisture from the absorbent body by squeezing.” Applicants assume the Examiner means the pressure-exerting roller as taught by *Henry*, not *Takeuchi*. Regardless, Claim 16 makes no mention of removing moisture from the absorbent body by squeezing.

Claim 16 recites “a transporting device moving a plurality of items of clothing successively in a direction of said at least one absorbent body and away therefrom and between said at least one absorbent body and said pressure-exerting roller.” As recited in Claim 16, the items of clothing pass *between* the absorbent body and the roller. Neither Takeuchi nor Henry teach or suggest “a transporting device moving a plurality of items of clothing successively in a direction of said at least one absorbent body and away therefrom and between said at least one absorbent body and said pressure-exerting roller,” as recited in Claim 16. Therefore, the prior art reference when combined do not teach or suggest all the claim limitations and the Examiner has not established a *prima facie* case of obviousness.

For these and other reasons, Takeuchi and Henry, either alone or in combination, do not teach or suggest the subject defined by independent Claim 16. Therefore, Claim 16 is allowable.

CONCLUSION

In view of the above, entry of the present Amendment and allowance of Claims 1-16 are respectfully requested. If the Examiner has any questions regarding this amendment, the Examiner is requested to contact the undersigned. Please note that Applicants have changed representation and are now represented by new counsel. The formal Revocation of Power of Attorney / New Power of Attorney and Change of Correspondence Address documents will be forthcoming. If an extension of time for this paper is required, petition for extension is herewith made.

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Name of Attorney Signing under 37 CFR 1.34

Respectfully submitted,



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